U.S. Fish & Wildlife Service

Accomplishment Report

The **Alpena Fishery Resources Office (FRO)** is located in Alpena, Michigan and works to meet U.S. Fish and Wildlife Service Fishery and Ecosystem goals within Lake Huron, Western Lake Erie, and connecting waters of the St. Marys River, St. Clair River, and Detroit River. Activities include Aquatic Species Conservation and Management, Aquatic Habitat Conservation and Management, Cooperation with Native Americans, Leadership in Science and Technology, Partnerships and Accountability, Public Use, and Workforce Management – all of which are conducted in alignment with the Service Fisheries Program Vision for the Future. The station is one of many field offices located within Region 3, the Great Lakes Big Rivers Region.

Aquatic Habitat Conservation and Management

Michigan Stream Team Receives Funding to Begin Fieldwork

Submitted by Heather Rawlings
Fish and Wildlife Biologist


Photo: Dave Fongers, DEQ

The Michigan Stream Team (Team), consisting of representatives from the Michigan Department of Natural Resources (MDNR), Michigan Department of Environmental Quality (MDEQ), U.S. Geological Survey (USGS), Michigan Department of Transportation (MDOT), Natural Resource Conservation Service (NRCS), U.S. Forest Service (USFS), Calhoun Conservation District, Michigan State University (MSU), and the Service met on January 25, 2006 in East Lansing, MI at the Service's East Lansing Field Office.
The Team was formed to develop regional curves showing bankfull dimensions versus drainage area for physiographic provinces in Michigan. The greatest item of interest at the January meeting was that the Team has received enough funding to begin fieldwork this summer to gather the data required to develop regional reference curves for Michigan, which is a short-term goal of the team. The MDEQ has awarded the Team funding in 319 funds for the next 3 years to hire a graduate student to lead data collection efforts. Kristine Bosley-Morse, an employee of the Calhoun Conservation District, and a graduate student at Michigan State University has been hired to lead this project. Ms. Bosley-Morse has been working with the Team since its inception.

MSU made a strong contribution to the project by committing to purchasing a total station (surveying unit) to assist with stream surveys. The MDNR has applied for and received a 2-year grant that will fund MDNR staff involvement, including a field crew to assist Ms. Bosley-Morse. USGS has committed to providing gaging data and analysis to the field crews, and all of the resource agencies will be needed to complete initial site checks, to gain trespass permission from private landowners, and to assist with future training efforts.

Mr. Dave Fongers from the MDEQ announced that the Team's website was almost completed, and was expected to be running by the end of February. The website is now on-line, and can be accessed by going to the Michigan Department of Environmental Quality's home page (http://www.michigan.gov/deq), and then search "Michigan Stream Team". The website describes the Team, its members, its purpose and accomplishments. The website also contains the finalized version of "Protocol for Field Surveys of Stream Morphology at Gaging Stations in Michigan", a document that serves as procedural protocol to conduct regional reference curve field data collection which was developed by the Team in 2005.

Regional reference curve development is important to all natural resource professionals concerned with proper river restoration. This critical data will take the guesswork out of river restoration in Michigan, and provide restoration efforts with the information to develop successful and stable outcomes to their projects. Alpena FRO Biologists Heather Rawlings and Susan Wells serve as Service representatives on the Team.

Regional reference curve development is important to all natural resource professionals concerned with proper river restoration. This critical data will take the guesswork out of river restoration in Michigan, and provide restoration efforts with the information to develop successful and stable outcomes to their projects. Completion of aquatic habitat restoration projects contribute to the "Aquatic Habitat Conservation and Management" priority of the Service's Fisheries Program Vision for the Future.

Aquatic Species Conservation and Management

Lake Whitefish Age Determination

Submitted by Scott Koproski
Fishery Biologist

During the month of January, Fishery Biologist Scott Koproski finished aging lake whitefish otolith samples collected during the 2004 and 2005 distribution study. This three-year study is funded through the Great Lakes Fish and Wildlife Restoration Act and involves the collaboration of seven agencies for the tagging of whitefish at eight Lake Huron main basin sites each year. The objective of this study is to delineate the spawning stocks of lake

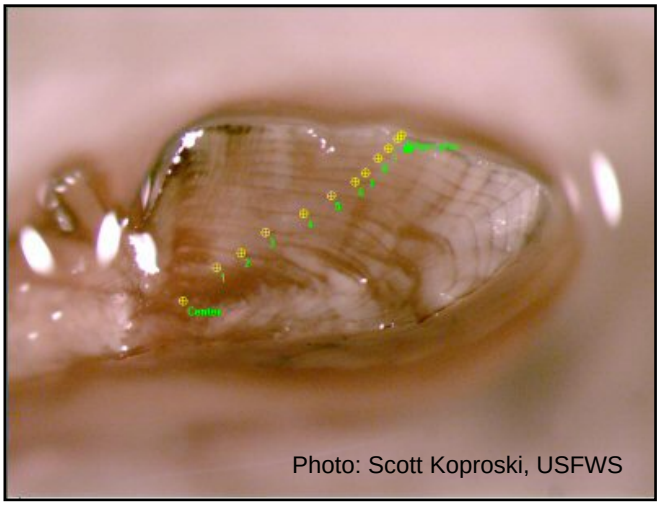

Photo: Scott Koproski, USFWS

whitefish in Lake Huron. At each location 1500-3000 lake whitefish will have a Floy Tag inserted, will be measured to the nearest millimeter, and scales will be removed for age determination. In addition to the tagged fish, 50 male and 50 female lake whitefish will be sacrificed daily for more extensive data collection. Biological data collection for these 100 fish includes length, weight, lamprey wounding, visceral fat indexing, sex, maturity and removal of age structures (scales, otoliths, and fin rays).

Koproski used the "crack and burn" technique to identify annuli present within each otolith. When this technique is used, two distinct growth patterns can be identified: broad summer growth and narrow winter growth. By counting the bands of winter growth, age estimates can be obtained from the otoliths. A total of 500 fish were aged using this technique.

This work is an example of Alpena FRO's commitment to the Service's Fisheries Program Vision for the Future priorities of "Aquatic Species Conservation and Management", "Partnerships and Accountability", and "Cooperation with Native American Tribes".

Gillnet Repair

Submitted by Adam Kowalski
Fish and Wildlife Biologist


Photo: Adam Kowalski, USFWS

During the month of January, Fishery Biologist Adam Kowalski mended approximately 3,600 ft of assessment gillnet. The nets consisted of 100 ft panels of 2" to 6" stretch mesh strung in ½" increments and were used by the Alpena FRO for the annual fishery independent lake whitefish assessment in 1836 Treaty waters. Mending consisted of inspecting every net for holes, broken floats, and broken ties. Holes were repaired by either sewing in new twine across gaps or by replacing large holes with new sections of net. If nets were damaged beyond repair, replacement nets were built.

Net repair is very important for collecting accurate and consistent data during our annual fisheries assessments. Nets must be strung similarly and repaired to the same standard each year to assure consistent gear selectivity across sampling years. Net repair and construction will continue throughout the winter until spring assessments start.

Gillnets are used by the Alpena FRO from spring through fall for lake whitefish and lake trout population assessments in Lake Huron. Lake whitefish and lake trout are native species harvested in both state and tribal commercial and sport fisheries. These population assessments are consistent with the Service's Fisheries Program Vision for the Future priority of "Aquatic

Species Conservation and Management". Much of the work is also required for implementation of the 2000 Consent Decree.

2005 Coded-Wire-Tag Data Compiled

Submitted by Aaron Woldt
Fishery Biologist

In January 2006, Fishery Biologist Aaron Woldt compiled lake trout coded-wire-tag (CWT) data for submission to the common Lake Huron Technical Committee (LHTC) CWT database. The common database was created in 1999 and includes lake trout CWT return data from 5 partner agencies (Michigan DNR, Chippewa/Ottawa Resource Authority (CORA), Ontario Ministry of Natural Resources, USGS Biological Resources Division (BRD), and the Service). CWTs are microscopic tags placed in the snouts of hatchery lake trout prior to stocking. Tags are extracted from lake trout at the time of harvest and yield information such as hatchery of origin, year planted, fish age, and fish strain. The Alpena FRO captures CWT lake trout in its fishery independent lake whitefish surveys and its mid-lake lake trout surveys. Recreationally caught CWT lake trout sampled by Michigan DNR and CWT heads collected by CORA are also processed by the Alpena FRO.

Woldt summarized all Service and Michigan DNR sport CWT returns processed by the Alpena FRO in 2005. CWTs were extracted and read by Fishery Biologist Adam Kowalski. Woldt formatted all data to conform to common database standards developed by the LHTC and forwarded data to Scott Nelson of USGS BRD in Ann Arbor for inclusion in the common database. The common database is used by members of the LHTC to evaluate lake trout movement, strain survival, effects of quality at release on survival, and effectiveness of the northern and mid-lake refuges.
Biologist Woldt will use the LHTC common database to update his analysis of Lake Huron lake trout movement and to update lake trout catch-at-age models used to set lake trout harvest limits in 1836 Treaty waters.

Capturing, processing, and analyzing lake trout CWT returns directly supports lake trout rehabilitation and influences setting of safe harvest levels by allowing agencies to assess lake trout movement patterns, differences in strain survival, effects of hatchery practices, and effectiveness of refuges. These outcomes are consistent with the Service's goal of building and maintaining self-sustaining populations of native fish species while meeting the needs of tribal communities under the "Aquatic Species Conservation and Management" priority of the Fisheries Program Vision for the Future.

Partnerships and Accountability

Lake Huron Technical Committee Prepares for the State of Lake Huron Conference

Submitted by Jerry McClain
Fishery Biologist

On January 17-19, the Lake Huron Technical Committee (LHTC) met in Port Huron, MI for its annual winter meeting. Although a number of agenda items addressed charges before the LHTC, the primary focus of this winter's meeting was to prepare for the upcoming State of Lake Huron Conference to be held in Windsor, Ontario in March 2006. Each of the Great Lakes provides an update on the "State of the Lake" on a five-year rotational basis at the annual Lake Committee meetings. In 2006, the focus will be on Lake Huron. During the January meeting LHTC members and resource persons provided draft oral presentations on their assigned segment of the Lake Huron fish community and received comments and suggestions for changes to be considered for the March conference.

Alpena FRO Project Leader McClain (Aquatic Invasive Species), Treaty Fisheries Unit Coordinator Woldt (Lake Trout) and Fishery Biologist Boase (Lake Sturgeon) each provided an oral presentation on their respective assignments. McClain, Woldt and Boase also serve as the lead author for sections of the written *State of Lake Huron in 2004* report which is expected to be delivered to the Great Lakes Fishery Commission (GLFC) for publication in its Special Publication series. The draft of the report is to be delivered to the GLFC in November 2006.

Participation as active members or resource persons of the Lake Huron Technical Committee (LHTC) is important for maintaining partnerships and collaboration for effective management of the Lake Huron fishery resources. This effort is consistent with and supportive of the "Partnerships and Accountability", and "Aquatic Species Conservation and Management" priorities of the Service's Fisheries Program Vision for the Future.

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January 2006

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